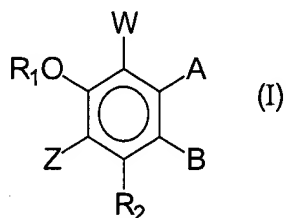


25. A method for the treatment of sunlight induced skin damage, comprising administering to a subject a therapeutically effective amount of one or more compounds of the formula I:



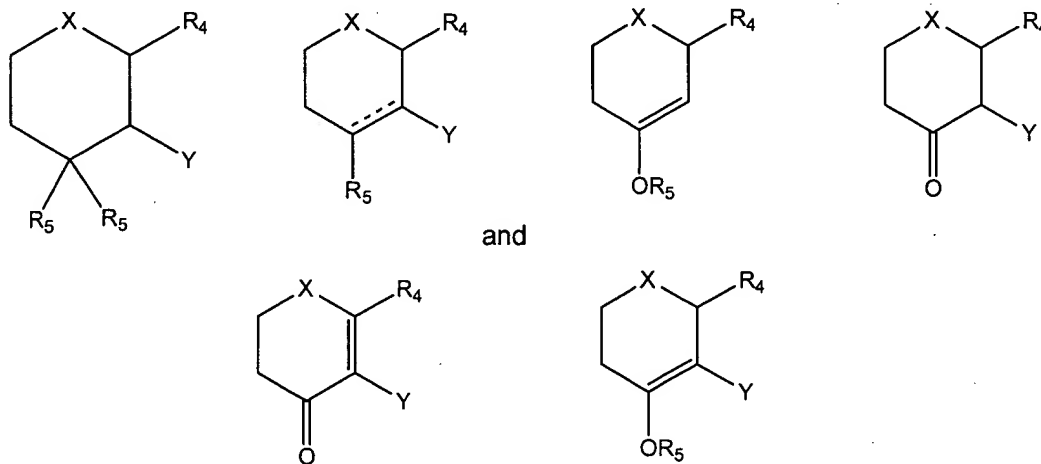
wherein

Z is H;

R<sub>1</sub> is H or R<sub>A</sub>CO, where R<sub>A</sub> is C<sub>1-10</sub> alkyl or an amino acid;

R<sub>2</sub> is H, OH, or OR<sub>B</sub>, where R<sub>B</sub> is an amino acid or COR<sub>A</sub>, where R<sub>A</sub> is C<sub>1-10</sub> alkyl or an amino acid;

W is H; and A and B taken together form a six membered ring selected from



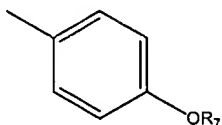
where “---” represents either a single bond or a double bond;

$R_4$  is H,  $COR_D$ ,  $CO_2R_C$ ,  $COR_E$ ,  $COOH$ ,  $COR_C$ , or  $CONHR_E$ , where  $R_D$  is H, OH,  $C_{1-10}$  alkyl or an amino acid,  $R_C$  is  $C_{1-10}$  alkyl,  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid;

$R_5$  is H,  $CO_2R_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

X is O, N, or S; and

Y is



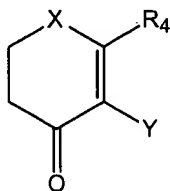
where  $R_7$  is H, or  $C_{1-10}$  alkyl;

with the proviso that compounds of the formula I where

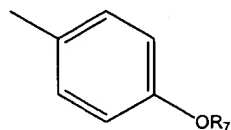
$R_1$ , W, and Z are H,

$R_2$  is H or OH,

A and B taken together are a six membered ring



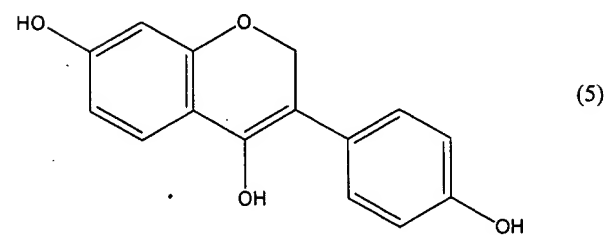
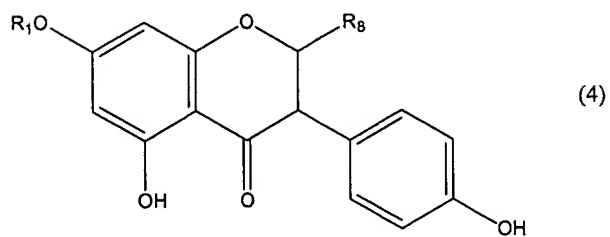
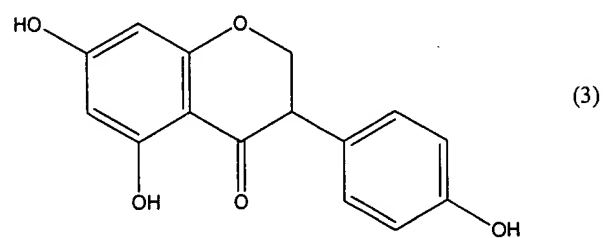
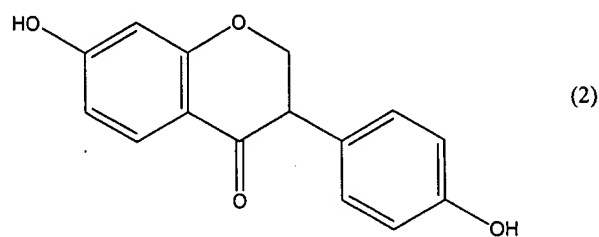
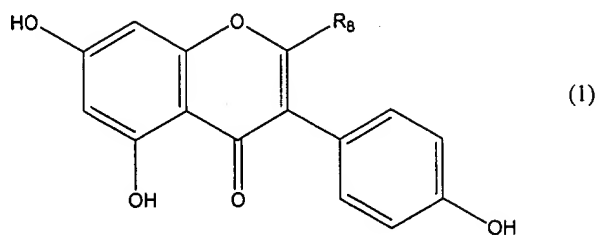
wherein Y is

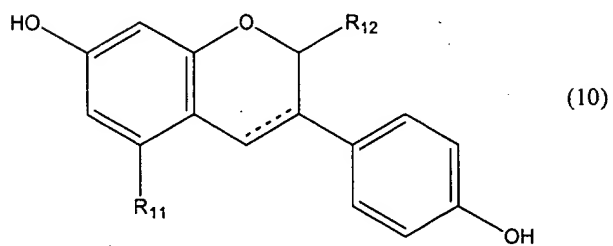
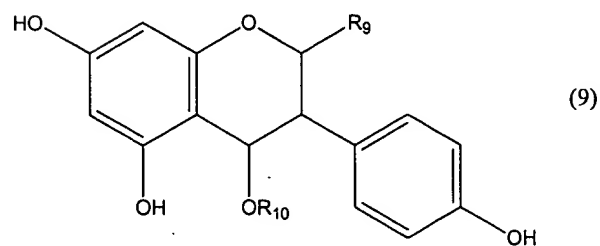
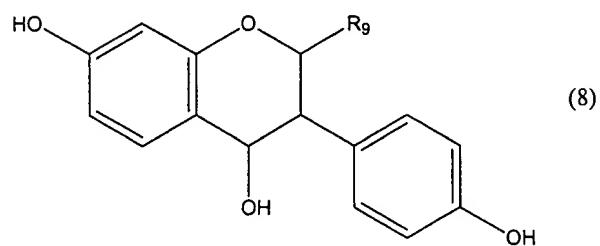
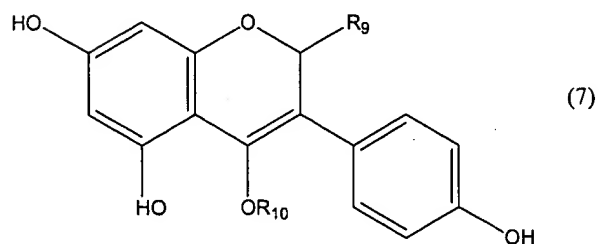
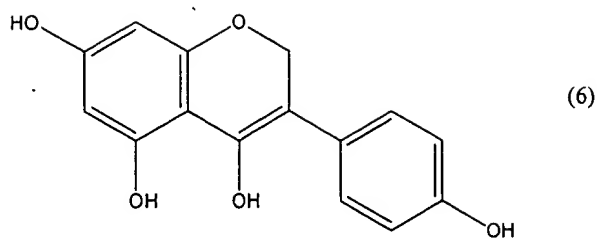


and  $R_7$  is H or  $CH_3$ ,

are excluded.

26. The method of claim 25, wherein at least one of the one or more compounds of the formula I is selected from:





wherein

$R_8$  is  $COR_D$ , where  $R_D$  is H, OH,  $C_{1-10}$  alkyl or an amino acid,

$R_9$  is  $CO_2R_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid,

and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

$R_{10}$  is  $COR_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $CO_2R_C$ , or  $CONHR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different; and

"---" represents either a single bond or double bond.

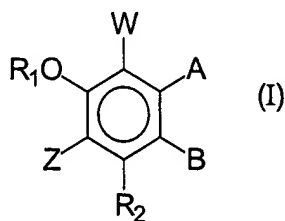
27. The method of claim 26, wherein the one or more compounds of formula I are administered with a carrier or excipient.

28. The method of claim 27, wherein the one or more compounds of formula I are administered to the subject topically, and wherein the carrier or excipient is selected from cream, gel, lotion, paste, spray, oil, aerosol, and ointment.

29. The method of claim 27, wherein the carrier or excipient is selected from a cosmetic skin cream and a sun screen.

30. The method of claim 27, wherein the one or more compounds of formula I are administered orally.

31. The method of claim 30, wherein the carrier or excipient is in a form selected from a tablet, capsule, lozenge, cachet, powder, granule, aqueous liquid, and non-aqueous liquid.
32. The method of claim 25, wherein the composition further comprises vitamin E.
33. The method of claim 25, wherein the method is a method for the treatment of wrinkles.
34. A sunscreen composition comprising:  
 one or more topically acceptable carriers; and  
 one or more compounds of the formula I:



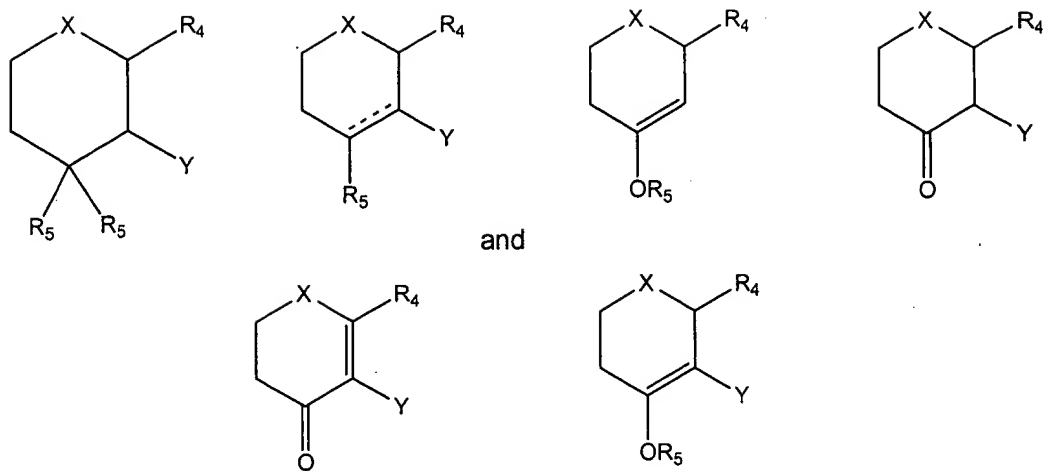
wherein

Z is H;

R<sub>1</sub> is H, or R<sub>A</sub>CO where R<sub>A</sub> is C<sub>1-10</sub> alkyl or an amino acid;

R<sub>2</sub> is H, OH, or OR<sub>B</sub>, where R<sub>B</sub> is an amino acid or COR<sub>A</sub> where R<sub>A</sub> is C<sub>1-10</sub> alkyl or an amino acid; and

W is H, and A and B taken together form a six membered ring selected from



where “---” represents either a single bond or a double bond;

wherein

$R_3$  is H,  $COR_A$ ,  $CO_2R_C$ , or  $COR_B$ , where  $R_A$  is  $C_{1-10}$  alkyl or an amino acid,  $R_C$  is  $C_{1-10}$

alkyl, and  $R_B$  is an amino acid or  $COR_A$ ;

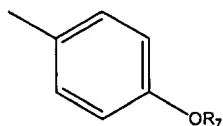
$R_4$  is H,  $COR_D$ ,  $CO_2R_C$ ,  $COR_E$ ,  $COOH$ ,  $COR_C$ , or  $CONHR_E$ , where  $R_D$  is H, OH,  $C_{1-10}$  alkyl or an amino acid,  $R_C$  is  $C_{1-10}$  alkyl,  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid;

$R_5$  is H,  $CO_2R_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

$R_6$  is H or hydroxy  $C_{1-10}$  alkyl;

X is O, N, or S; and

Y is



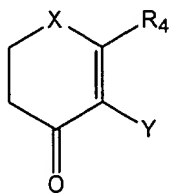
where  $R_7$  is H, or  $C_{1-10}$  alkyl;

with the proviso that compounds of the formula I where

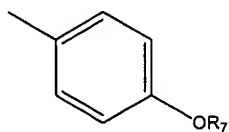
$R_1$ , W, and Z are H,

$R_2$  is H or OH,

A and B taken together are a six membered ring



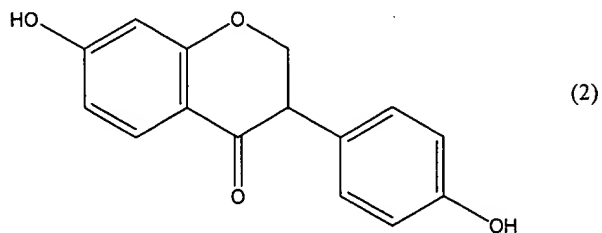
wherein Y is



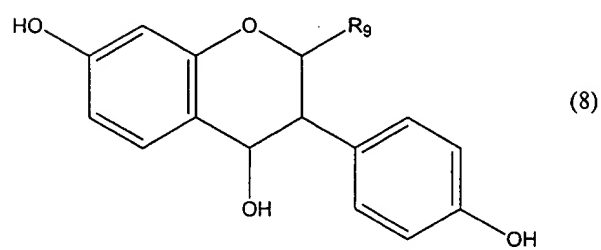
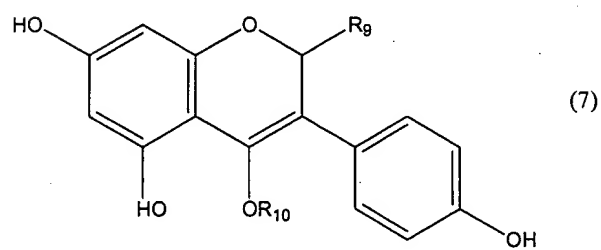
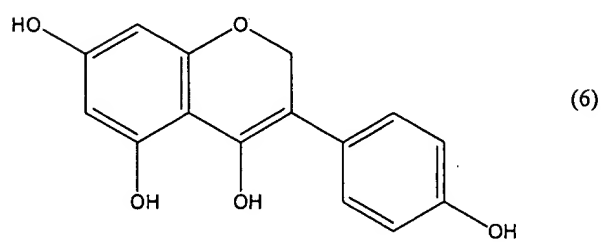
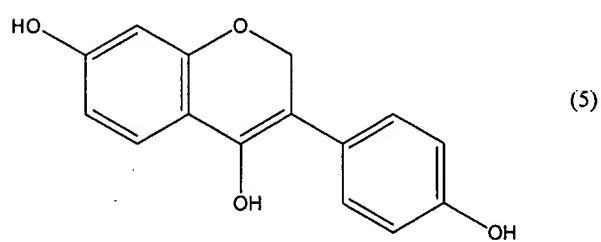
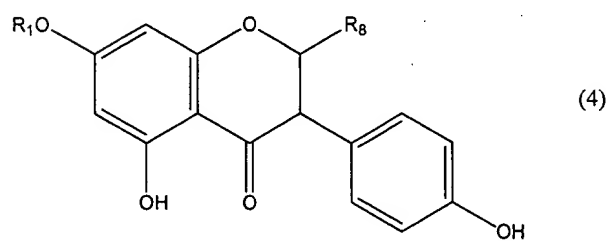
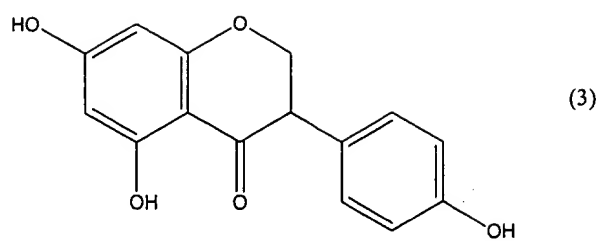
and  $R_7$  is H or CH<sub>3</sub>,

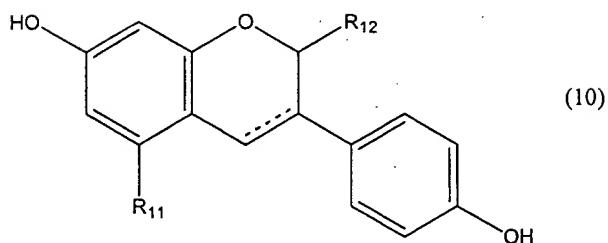
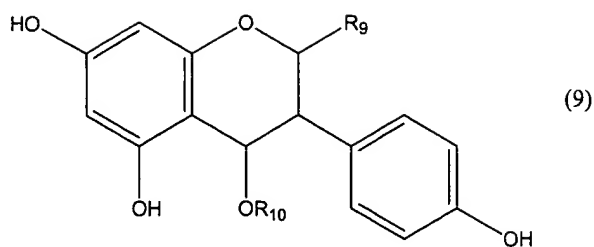
are excluded.

35. The composition of claim 34, wherein at least one of the one or more compounds of the formula I is selected from:









wherein

$R_8$  is  $COR_D$ , where  $R_D$  is H, OH,  $C_{1-10}$  alkyl or an amino acid;

$R_9$  is  $CO_2R_C$  or  $COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid;

$R_{10}$  is  $COR_C$  or  $COR_C R_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid;

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $CO_2R_C$ , or  $CONHR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid; and

“---” represents either a single bond or double bond.

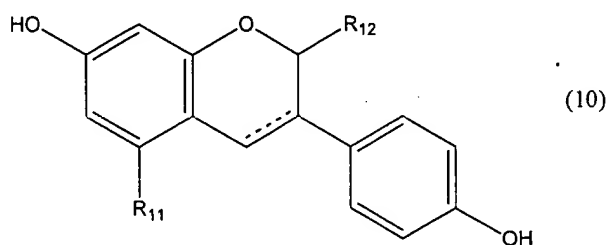
36. The composition of claim 35, wherein the composition further comprises a carrier or excipient.

37. The composition of claim 36, wherein the composition is administered to the subject topically and the carrier or excipient is selected from cream, gel, lotion, paste, spray, oil, aerosol, and ointment.

38. The composition of claim 36, wherein the carrier or excipient is selected from a cosmetic skin cream and a sun screen.

39. The composition of claim 35, wherein the composition further comprises vitamin E.

40. A method for the treatment of sunlight induced skin damage comprising topically administering to a subject a composition comprising a compound of the formula:



wherein

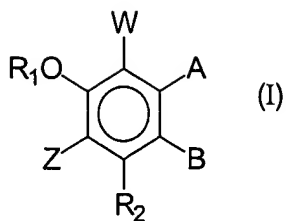
$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $\text{CO}_2\text{R}_C$ , or  $\text{CONHR}_E$ , where  $\text{R}_C$  is  $\text{C}_{1-10}$  alkyl, and  $\text{R}_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid; and

“---” represents either a single bond or double bond.

41. The method of claim 40, wherein the composition further comprises vitamin E.

42. A composition for topical administration to the skin comprising one or more compounds of the formula I:



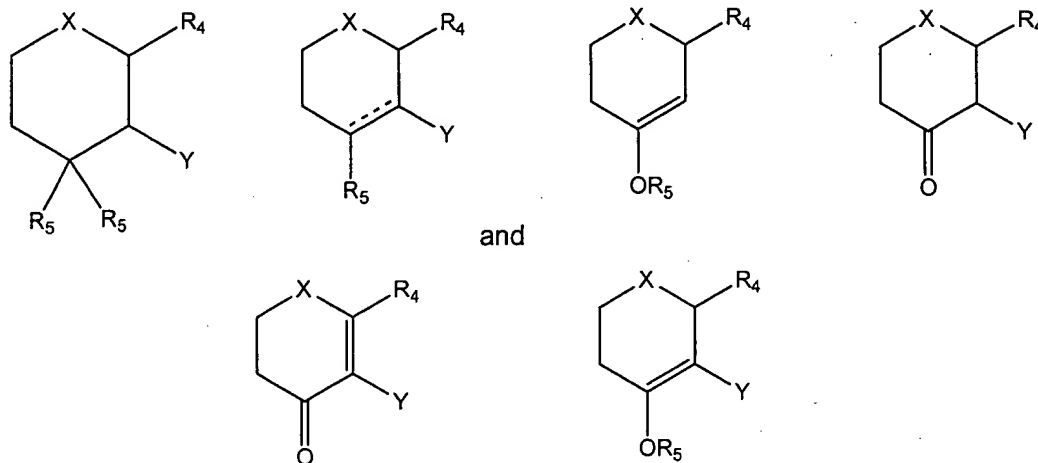
wherein

Z is H;

$R_1$  is H or  $R_A\text{CO}$ , where  $R_A$  is  $C_{1-10}$  alkyl or an amino acid;

$R_2$  is H, OH, or  $OR_B$ , where  $R_B$  is an amino acid or  $COR_A$ , where  $R_A$  is  $C_{1-10}$  alkyl or an amino acid;

W is H; and A and B taken together form a six membered ring selected from



wherein “---” represents either a single bond or a double bond;

wherein

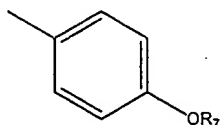
$R_3$  is H,  $COR_A$ ,  $CO_2R_C$ , or  $COR_B$ , where  $R_A$  is  $C_{1-10}$  alkyl or an amino acid,  $R_C$  is  $C_{1-10}$  alkyl, and  $R_B$  is an amino acid or  $COR_A$ ;

$R_4$  is H,  $COR_D$ ,  $CO_2R_C$ ,  $COR_E$ ,  $COOH$ ,  $COR_C$ , or  $CONHR_E$ , where  $R_D$  is H, OH,  $C_{1-10}$  alkyl or an amino acid,  $R_C$  is  $C_{1-10}$  alkyl,  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid;

$R_5$  is H,  $CO_2R_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

X is O, N, or S; and

Y is



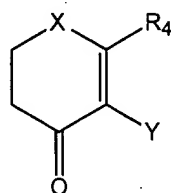
where  $R_7$  is H, or  $C_{1-10}$  alkyl,

with the proviso that compounds of the formula I where

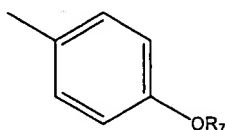
$R_1$ , W, and Z are H,

$R_2$  is H or OH,

A and B taken together are a six membered ring



wherein Y is

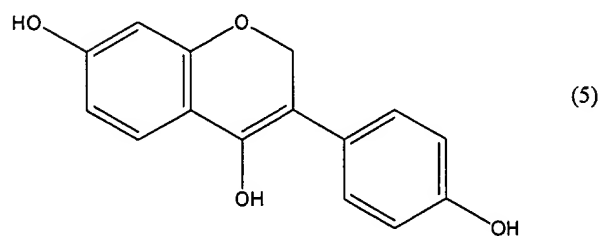
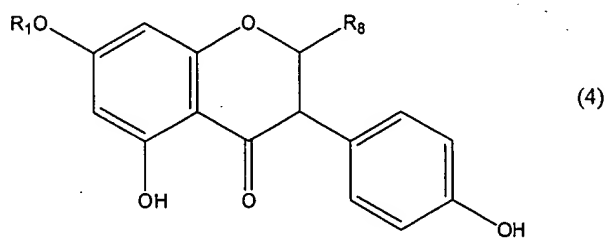
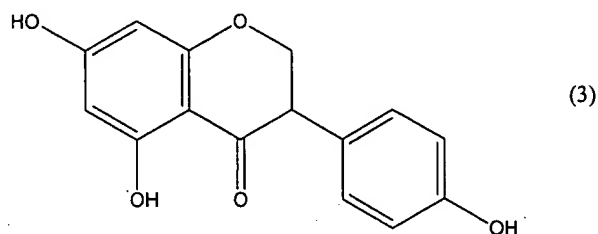
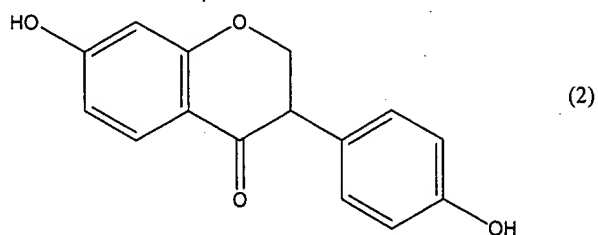


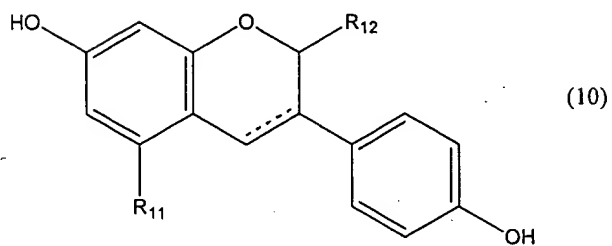
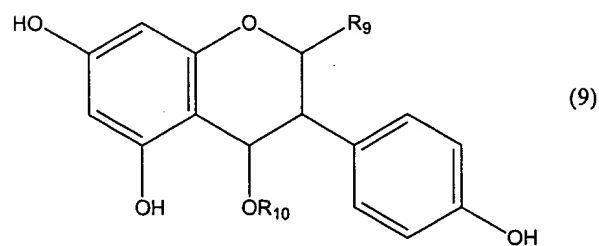
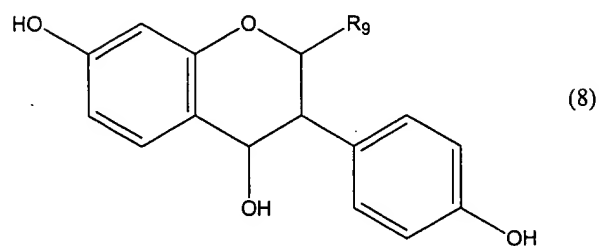
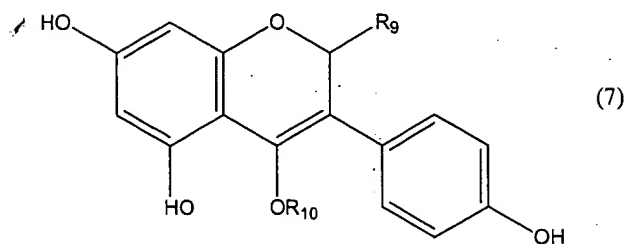
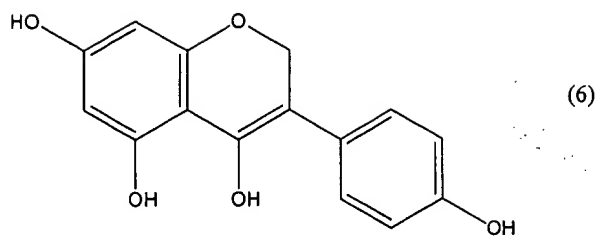
and  $R_7$  is H or  $CH_3$ ,

are excluded;

in the form of an ointment, cream, lotion, paste, gel, spray, aerosol or oil.

43. The composition of claim 42 wherein at least one of the one or more compounds of the formula I are selected from:





wherein

$R_8$  is  $\text{COR}_D$ , where  $R_D$  is H, OH,  $\text{C}_{1-10}$  alkyl or an amino acid,

$R_9$  is  $\text{CO}_2\text{R}_C$ , or  $\text{COR}_C\text{OR}_E$ , where  $R_C$  is  $\text{C}_{1-10}$  alkyl, and  $R_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid,

and with the proviso that where the two  $R_5$  groups are attached to the same group they are identical or different;

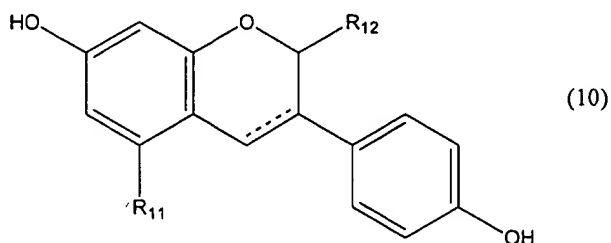
$R_{10}$  is  $COR_C$ , or  $COR_COR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an amino acid,  
and with the proviso that where the two  $R_5$  groups are attached to the same group they are  
identical or different;

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $CO_2R_C$ , or  $CONHR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an  
amino acid, and with the proviso that where the two  $R_5$  groups are attached to the same  
group they are identical or different; and

"---" represents either a single bond or double bond.

44. The composition of claim 43 comprising a compound of the formula:



wherein

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $CO_2R_C$ , or  $CONHR_E$ , where  $R_C$  is  $C_{1-10}$  alkyl, and  $R_E$  is H,  $C_{1-10}$  alkyl or an  
amino acid; and

"---" represents either a single bond or double bond; and

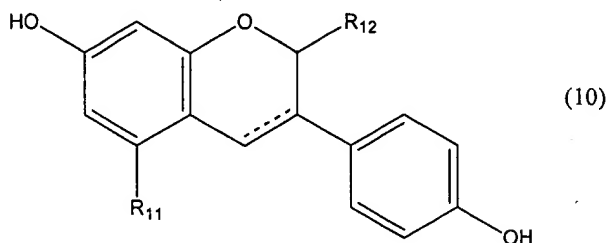
a pharmaceutically acceptable carrier or excipient.

45. The composition of claim 42 which is a cosmetic skin cream.



46. The composition of claim 42 which is a sunscreen.

47. A cosmetic skin cream which comprises a compound of the formula:



wherein

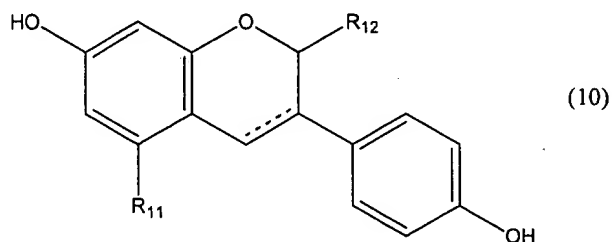
$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $\text{CO}_2\text{R}_C$ , or  $\text{CONHR}_E$ , where  $\text{R}_C$  is  $\text{C}_{1-10}$  alkyl, and  $\text{R}_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid; and

“---” represents either a single bond or double bond; and

a pharmaceutically acceptable carrier or excipient.

48. A sunscreen for protection of the skin from sunlight induced skin damage which comprises a compound of the formula:



wherein

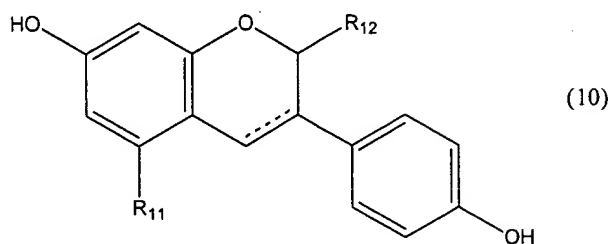
$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $\text{CO}_2R_C$ , or  $\text{CONHR}_E$ , where  $R_C$  is  $\text{C}_{1-10}$  alkyl, and  $R_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid; and

“---” represents either a single bond or double bond; and

a pharmaceutically acceptable carrier or excipients.

49. A compound of the formula:



wherein

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $\text{CO}_2R_C$ , or  $\text{CONHR}_E$ , where  $R_C$  is  $\text{C}_{1-10}$  alkyl, and  $R_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid; and

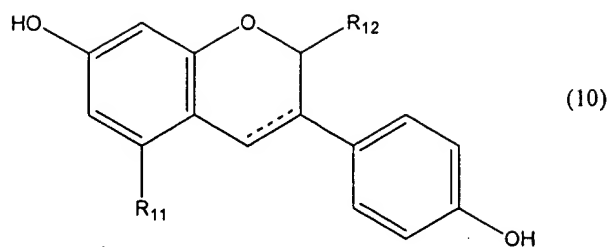
“---” represents either a single bond or double bond;

with the proviso that compounds where  $R_{11}$  and  $R_{12}$  are H, and

“---” is a single bond,

are excluded.

50. A composition comprising a compound of the formula:



wherein

$R_{11}$  is H or OH;

$R_{12}$  is H, COOH,  $\text{CO}_2R_C$ , or  $\text{CONHR}_E$ , where  $R_C$  is  $\text{C}_{1-10}$  alkyl, and  $R_E$  is H,  $\text{C}_{1-10}$  alkyl or an amino acid; and

“ $\text{---}$ ” represents either a single bond or double bond; and

a pharmaceutically acceptable carrier or excipient.